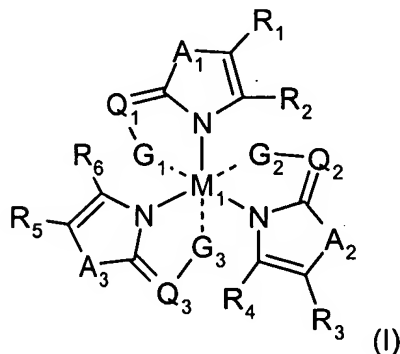


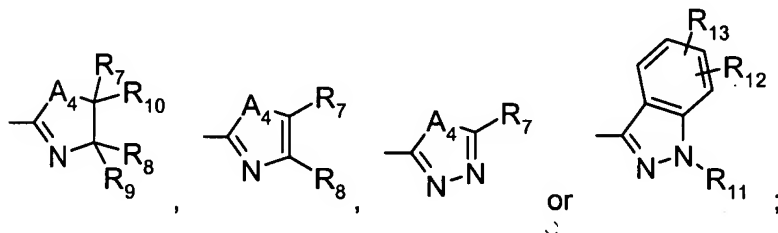
In the claims:

1. **(currently amended)** An optical recording medium comprising a substrate, a recording layer and optionally one or more reflecting layers, wherein the recording layer comprises a compound of formula



or a tautomer thereof, wherein

G₁, G₂ and G₃ are each independently of the other



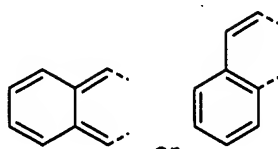
A₁, A₂ and A₃ are each independently of the other N(R₁₄), O, S or Se and A₄ is C(C₁-C₅alkyl)₂, C(C₄-C₅alkylene), N(R₁₄), O, S, Se, N=C(R₁₅) or CH=C(R₁₆);

M₁ is an at least trivalent metal of groups 3 to 15 [formerly groups IIIA to VB]; ~~preferably Co(III), Cr(III), Ru(III), Fe(III), Mn(III), V(III), Ti(III), Y(III), Mo(III), W(III), Nb(III), Rh(III), Ta(III), Ir(III), Au(III), Al(III), As(III), Sb(III), Bi(III), Sc(III), La(III), Ce(III), Pr(III), Nd(III), Pm(III), Sm(III), Eu(III), Gd(III), Tb(III), Dy(III), Ho(III), Er(III), Tm(III), Yb(III) or Lu(III), most preferred Co(III) or Cr(III);~~
~~Q₁, Q₂ and Q₃ are each independently of the other C(R₁₇), N or P;~~

R₁, R₂, R₃, R₄, R₅, R₆, R₇, R₈, R₉, R₁₀ and R₁₆ are each independently of the others hydrogen, R₁₈, or C₆-C₁₂aryl, C₄-C₁₂heteroaryl, C₇-C₁₂aralkyl or C₅-C₁₂heteroaralkyl each unsubstituted or substituted by one or more, where applicable identical or different, radicals R₁₈; or

R₁ and R₂, R₃ and R₄, R₅ and R₆, R₇ and R₈, R₇ and R₁₅ and/or R₇ and R₁₆, together in pairs, are C₃-C₆alkylene or C₃-C₆alkenylene, each of which is unsubstituted or substituted by one or more,

where applicable identical or different, radicals R_{19} and may be uninterrupted or interrupted by O, S or



$N(R_{14})$, or 1,4-butadiene, or , each of which is unsubstituted or substituted by one or more, where applicable identical or different, radicals R_{18} and in which 1 or 2 carbon atoms may have been replaced by nitrogen;

R_{11} , R_{14} and R_{15} are each independently of the others C_1 - C_{24} alkyl, C_3 - C_{24} cycloalkyl, C_2 - C_{24} alkenyl, C_3 - C_{24} cycloalkenyl, C_1 - C_4 alkyl-[O- C_1 - C_4 alkylene] $_m$ or C_1 - C_4 alkyl-[NH- C_1 - C_4 alkylene] $_m$, each of which is unsubstituted or substituted by one or more, where applicable identical or different, radicals R_{19} ; or C_6 - C_{12} aryl, C_4 - C_{12} heteroaryl, C_7 - C_{12} aralkyl or C_5 - C_{12} heteroaralkyl, each of which is unsubstituted or substituted by one or more, where applicable identical or different, radicals R_{18} ;

R_{12} , R_{13} and R_{18} are each independently of the others R_{20} or C_1 - C_{12} alkyl, C_3 - C_{12} cycloalkyl, C_1 - C_{12} alkylthio, C_3 - C_{12} cycloalkylthio, C_1 - C_{12} alkoxy or C_3 - C_{12} cycloalkoxy each unsubstituted or substituted by one or more, where applicable identical or different, radicals R_{19} ;

R_{17} is hydrogen, halogen, cyano, hydroxy, C_1 - C_{12} alkoxy, C_3 - C_{12} cycloalkoxy, C_1 - C_{12} alkylthio, C_3 - C_{12} cycloalkylthio, amino, nitro, formyl, $C(R_{16})=CR_{21}R_{22}$, $C(R_{16})=NR_{23}$, $N=CR_{23}R_{24}$, NHR_{25} , $NR_{26}R_{27}$, $COO-R_{26}$, carboxy, carbamoyl, $CONH-R_{26}$, $CONR_{26}R_{27}$, R_{28} , $N=N-R_{28}$ or R_{29} ;

R_{19} is halogen, hydroxy, $O-R_{26}$, $O-CO-R_{26}$, $S-R_{26}$, NH_2 , $NH-R_{26}$, $NR_{26}R_{27}$, NH_3^+ , $NH_2R_{26}^+$, $NHR_{26}R_{27}^+$, $NR_{25}R_{26}R_{27}^+$, $NR_{26}-CO-R_{25}$, $NR_{26}COOR_{25}$, cyano, formyl, $COO-R_{26}$, carboxy, carbamoyl, $CONH-R_{26}$, $CONR_{26}R_{27}$, ureido, $NH-CO-NHR_{25}$, $NR_{26}-CO-NHR_{25}$, phosphato, $PR_{25}R_{26}$, $POR_{25}OR_{26}$, $P(=O)OR_{25}OR_{26}$, $OPR_{25}R_{26}$, $OPR_{25}OR_{26}$, $OP(=O)R_{25}OR_{26}$, OPO_3R_{26} , $OP(=O)OR_{25}OR_{26}$, SO_2R_{26} , sulfato, sulfo, R_{28} , $N=N-R_{28}$, or C_1 - C_{12} alkoxy or C_1 - C_{12} cycloalkoxy each unsubstituted or mono- or poly-substituted by halogen;

R_{20} is halogen, nitro, cyano, thiocyanato, hydroxy, $O-R_{23}$, $O-CO-R_{23}$, $S-R_{23}$, CHO , COR_{24} , $CHOR_{23}OR_{30}$, $CR_{24}OR_{23}OR_{30}$, R_{31} , $N=N-R_{31}$, $N=CR_{23}R_{24}$, $N=CR_{21}R_{22}$, $C(R_{32})=NR_{23}$, $C(R_{32})=NR_{21}$, $C(R_{32})=CR_{21}R_{22}$, NH_2 , $NH-R_{23}$, $NR_{23}R_{24}$, NH_3^+ , $NH_2R_{23}^+$, $NHR_{23}R_{24}^+$, $NR_{23}R_{24}R_{30}^+$, $CONH_2$, $CONHR_{23}$, $CONR_{23}R_{24}$, SO_2R_{23} , SO_2NH_2 , SO_2NHR_{23} , $SO_2NR_{23}R_{24}$, $COOH$, $COOR_{23}$, $OCOOR_{23}$, $NHCOR_{23}$, $NR_{23}COR_{30}$, $NHCOOR_{23}$, $NR_{23}COOR_{30}$, ureido, $NR_{23}-CO-NHR_{30}$, $B(OH)_2$, $B(OH)(OR_{23})$, $B(OR_{23})OR_{30}$,

phosphato, $\text{PR}_{23}\text{R}_{30}$, $\text{POR}_{23}\text{OR}_{30}$, $\text{P(=O)OR}_{23}\text{OR}_{30}$, $\text{OPR}_{23}\text{R}_{30}$, $\text{OPR}_{23}\text{OR}_{30}$, $\text{OP(=O)R}_{23}\text{OR}_{30}$, $\text{OP(=O)OR}_{23}\text{OR}_{30}$, $\text{OPO}_3\text{R}_{23}$, sulfato or sulfo;

R_{21} and R_{22} are each independently of the other $\text{NR}_{26}\text{R}_{27}$, CN , CONH_2 , CONHR_{23} , $\text{CONR}_{23}\text{R}_{24}$ or COOR_{24} ;

R_{23} , R_{24} and R_{30} are each independently of the others R_{31} , or $\text{C}_1\text{-C}_{12}\text{alkyl}$, $\text{C}_3\text{-C}_{12}\text{cycloalkyl}$, $\text{C}_2\text{-C}_{12}\text{alkenyl}$ or $\text{C}_3\text{-C}_{12}\text{cycloalkenyl}$ each unsubstituted or substituted by one or more, where applicable identical or different, halogen, hydroxy, $\text{C}_1\text{-C}_{12}\text{alkoxy}$ or $\text{C}_3\text{-C}_{12}\text{cycloalkoxy}$ radicals; or R_{16} and R_{23} together, R_{17} and R_{23} together and/or R_{23} and R_{30} together are $\text{C}_2\text{-C}_{12}\text{alkylene}$, $\text{C}_3\text{-C}_{12}\text{cycloalkylene}$, $\text{C}_2\text{-C}_{12}\text{alkenylene}$ or $\text{C}_3\text{-C}_{12}\text{cycloalkenylene}$, each of which is unsubstituted or substituted by one or more, where applicable identical or different, halogen, hydroxy, $\text{C}_1\text{-C}_{12}\text{alkoxy}$ or $\text{C}_3\text{-C}_{12}\text{cycloalkoxy}$ radicals; or

R_{23} and R_{24} together with the common nitrogen are pyrrolidine, piperidine, piperazine or morpholine, each of which is unsubstituted or mono- to tetra-substituted by $\text{C}_1\text{-C}_4\text{alkyl}$; or carbazole, phenoxazine or phenothiazine, each of which is unsubstituted or substituted by one or more, where applicable identical or different, radicals R_{33} ;

R_{25} , R_{26} and R_{27} are each independently of the others $\text{C}_1\text{-C}_{12}\text{alkyl}$, $\text{C}_3\text{-C}_{12}\text{cycloalkyl}$, $\text{C}_2\text{-C}_{12}\text{alkenyl}$, $\text{C}_3\text{-C}_{12}\text{cycloalkenyl}$, $\text{C}_6\text{-C}_{12}\text{aryl}$, $\text{C}_4\text{-C}_{12}\text{heteroaryl}$, $\text{C}_7\text{-C}_{12}\text{aralkyl}$ or $\text{C}_5\text{-C}_{12}\text{heteroaralkyl}$; or

R_{26} and R_{27} together with the common nitrogen are pyrrolidine, piperidine, piperazine or morpholine, each of which is unsubstituted or mono- to tetra-substituted by $\text{C}_1\text{-C}_4\text{alkyl}$;

R_{28} is $\text{C}_6\text{-C}_{12}\text{aryl}$, $\text{C}_4\text{-C}_{12}\text{heteroaryl}$, $\text{C}_7\text{-C}_{12}\text{aralkyl}$ or $\text{C}_5\text{-C}_{12}\text{heteroaralkyl}$, each of which is unsubstituted or substituted by one or more, where applicable identical or different, radicals R_{20} or R_{29} ;

R_{29} is $\text{C}_1\text{-C}_{12}\text{alkyl}$, $\text{C}_3\text{-C}_{12}\text{cycloalkyl}$, $\text{C}_2\text{-C}_{12}\text{alkenyl}$ or $\text{C}_3\text{-C}_{12}\text{cycloalkenyl}$ each unsubstituted or substituted by one or more, where applicable identical or different, halogen, hydroxy, $\text{C}_1\text{-C}_{12}\text{alkoxy}$ or $\text{C}_3\text{-C}_{12}\text{cycloalkoxy}$ radicals;

R_{31} is $\text{C}_6\text{-C}_{12}\text{aryl}$, $\text{C}_4\text{-C}_{12}\text{heteroaryl}$, $\text{C}_7\text{-C}_{12}\text{aralkyl}$ or $\text{C}_5\text{-C}_{12}\text{heteroaralkyl}$, each of which is unsubstituted or substituted by one or more, where applicable identical or different, radicals R_{33} ;

R₃₂ is hydrogen, cyano, hydroxy, C₁-C₁₂alkoxy, C₃-C₁₂cycloalkoxy, C₁-C₁₂alkylthio, C₃-C₁₂cycloalkylthio, amino, NHR₂₅, NR₂₆R₂₇, R₂₈, halogen, nitro, formyl, N=N-R₂₈, COO-R₂₆, carboxy, carbamoyl, CONH-R₂₆, CONR₂₆R₂₇, N=CR₂₃R₂₄, or C₁-C₁₂alkyl, C₃-C₁₂cycloalkyl, C₂-C₁₂alkenyl or C₃-C₁₂cycloalkenyl each unsubstituted or substituted by one or more, where applicable identical or different, halogen, hydroxy, C₁-C₁₂alkoxy or C₃-C₁₂cycloalkoxy radicals;

R₃₃ is nitro, SO₂NHR₂₆, SO₂NR₂₆R₂₇, or C₁-C₁₂alkyl, C₃-C₁₂cycloalkyl, C₁-C₁₂alkylthio, C₃-C₁₂cycloalkylthio, C₁-C₁₂alkoxy or C₃-C₁₂cycloalkoxy each unsubstituted or substituted by one or more, where applicable identical or different, radicals R₁₉;

and

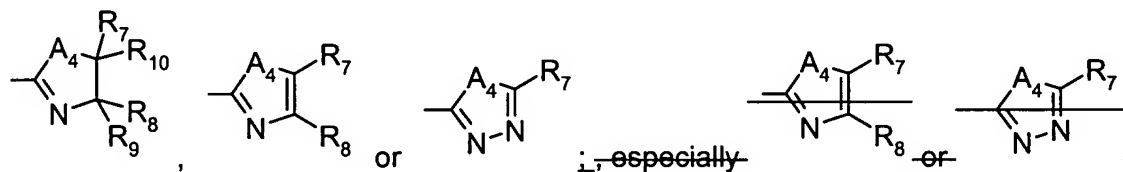
m is a number from 1 to 10.

2. **(currently amended)** An optical recording medium according to claim 1, wherein M1 is a trebly positively charged cation, ~~preferably Co³⁺, Cr³⁺, Ru³⁺, Fe³⁺, Mn³⁺, Au³⁺, Al³⁺, Sb³⁺, Bi³⁺, Se³⁺, La³⁺ or Ce³⁺, most preferred Co³⁺ or Cr³⁺.~~

3. **(currently amended)** An optical recording medium according to claim 1 ~~or 2~~, wherein the recording layer comprises a compound of formula (I) wherein

A₁, A₂, A₃ and A₄ are each independently of the others O, S or N(R₁₄) and/or Q₁, Q₂ and Q₃ are C(R₁₇) or N;

G₁, G₂ and G₃ are each independently of the other



R₁, R₃, R₅, R₇, R₁₀ and R₁₆ are each independently of the others hydrogen, R₁₈, or C₆-C₁₂aryl or C₇-C₁₂aralkyl each unsubstituted or substituted by one or more, where applicable identical or different, radicals R₁₈;

R₂, R₄, R₆, R₈ and R₉ are each independently of the others H, F, OH, OCH₃, OCF₃, CH₃, CF₃, C₂H₅, C₂H₂F₃, C₂H₃F₂, C₂F₅, CH₂OH, CF₂OH or CH₂OCH₃;

R₁₄ and R₁₅ are each independently of the others unsubstituted or R₁₉-substituted C₁-C₈alkyl;

R₁₂ and R₁₈ are each independently of the other halogen, nitro, cyano, O-R₂₃, CHO, CH=C(CN)₂, CH=C(CN)CONH₂, CH=C(CN)CONHR₂₃, CH=C(CN)CONR₂₃R₂₄, CH=C(CN)COOR₂₃, CH=C(COOR₂₃)COOR₂₄, CONH₂, CONHR₂₃, CONR₂₃R₂₄, SO₂C₁-C₁₂alkyl, SO₂NH₂, SO₂NHR₂₃, SO₂NR₂₃R₂₄, COOH, COOR₂₃, NHCOR₂₃, NR₂₃COR₃₀, NHCOOR₂₃, NR₂₃COOR₃₀, ureido, P(=O)OR₂₃OR₃₀, sulfo, or C₁-C₁₂alkyl, C₁-C₁₂alkylthio or C₁-C₁₂alkoxy each unsubstituted or substituted by one or more, where applicable identical or different, radicals R₁₉;

R₁₇ is hydrogen, halogen, cyano, nitro, formyl, C(R₁₆)=CR₂₁R₂₂, C(R₁₆)=NR₂₃, COO-R₂₆, carboxy, carbamoyl, CONH-R₂₆, CONR₂₆R₂₇, N=N-R₂₈, or C₁-C₁₂alkyl unsubstituted or substituted by one or more halogen substituents;

R₁₉ is halogen, hydroxy, O-R₂₆, NH₂, NH-R₂₆, NR₂₆R₂₇, NR₂₆-CO-R₂₅, NR₂₆COOR₂₅, cyano, COO-R₂₆, carboxy, CONH-R₂₆, CONR₂₆R₂₇, sulfato, sulfo, or C₁-C₁₂alkoxy unsubstituted or mono- or poly-substituted by halogen;

R₂₃, R₂₄ and R₃₀ are each independently of the others C₁-C₁₂alkyl unsubstituted or substituted by one or more, where applicable identical or different, halogen, hydroxy or C₁-C₁₂alkoxy radicals, or unsubstituted C₆-C₁₂aryl or C₇-C₁₂aralkyl; or

R₂₃ and R₂₄ together with the common nitrogen are morpholine, or piperidine N-substituted by C₁-C₄alkyl;

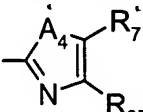
R₂₅, R₂₆ and R₂₇ are each independently of the others C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₆-C₁₂aryl or C₇-C₁₂aralkyl; or

R₂₆ and R₂₇ together with the common nitrogen are morpholine, or piperidine N-substituted by C₁-C₄alkyl;

R₃₁ is unsubstituted or substituted C₆-C₁₂aryl or C₇-C₁₂aralkyl; ~~especially a metallocenyl radical;~~ and/or

m is a number from 1 to 4.

4. **(currently amended)** An optical recording medium according to claim 1, ~~2 or 3~~, wherein the recording layer comprises a compound of formula (I) wherein Q₁, Q₂ and Q₃ are C(R₁₇); G₁, G₂ and G₃

are ; and A₁, A₂, A₃ and A₄ are O, S or N(R₁₄);

R₁₄ is C₁-C₂₄alkyl, C₁-C₄alkyl-[O-C₁-C₄alkylene]_m or C₁-C₄alkyl-[NH-C₁-C₄alkylene]_m, each of which is unsubstituted or substituted by one or more, where applicable identical or different, radicals R₁₉, or C₆-C₁₂aryl unsubstituted or substituted by one or more, where applicable identical or different, radicals R₁₈;

R₁₇ is hydrogen, cyano, COO-R₂₆ or C₁-C₁₂alkyl;

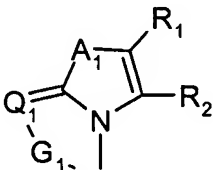
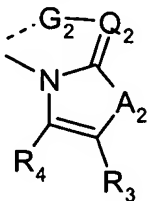
R₁₈ is halogen, nitro, cyano, O-R₂₃, CH=C(CN)₂, COOR₂₃, ureido, CONR₂₆R₂₇, SO₂R₂₆,

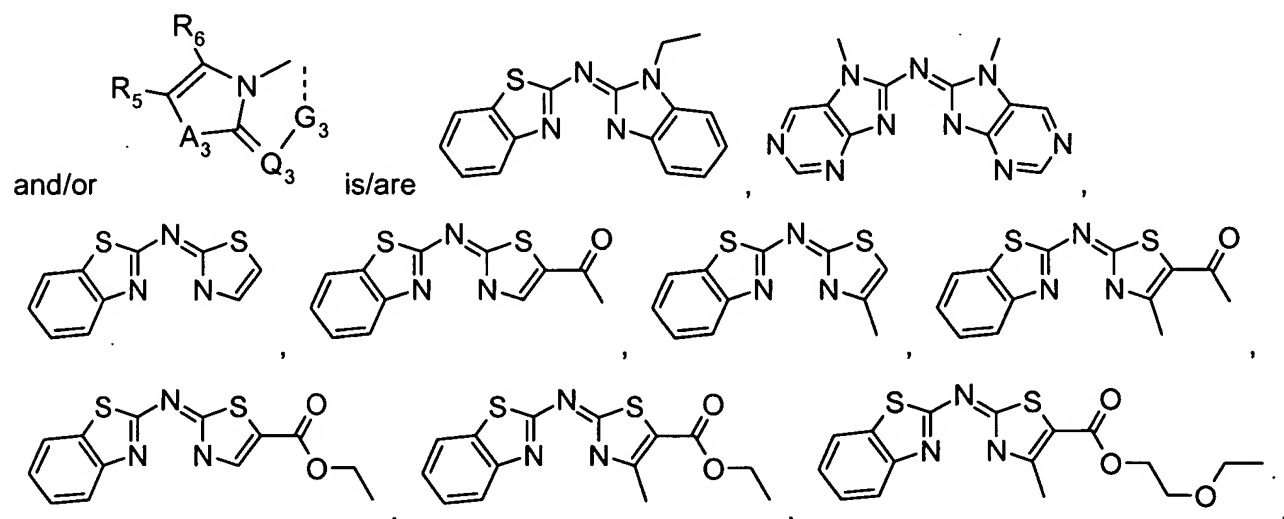
P(=O)OR₂₃OR₃₀ or unsubstituted or substituted C₁-C₁₂alkyl;

R₁₉ is halogen, hydroxy, O-R₂₆, cyano, COO-R₂₆ or carboxy; and

R₃₇ is H, methyl, ethyl or isopropyl, ~~in particular H.~~

5. **(currently amended)** An optical recording medium according to claim 1, ~~2, 3 or 4~~, wherein the

recording layer comprises a compound of formula (I) wherein  and/or 



11. **(original)** A compound according to claim 10, wherein R₂, R₄, R₆, R₈, R₉ and R₁₁ are hydrogen.

12. **(currently amended)** ~~Use of a compound according to claim 10 or 11~~ A method of for optical recording, wherein the data is recorded on an optical recording medium containing a compound according to claim 10 preferably at a wavelength of from 350 to 500 nm.

13. **(new)** An optical recording medium according to claim 1, wherein in formula (I) M₁ is Co(III), Cr(III), Ru(III), Fe(III), Mn(III), V(III), Ti(III), Y(III), Mo(III), W(III), Nb(III), Rh(III), Ta(III), Ir(III), Au(III), Al(III), As(III), Sb(III), Bi(III), Sc(III), La(III), Ce(III), Pr(III), Nd(III), Pm(III), Sm(III), Eu(III), Gd(III), Tb(III), Dy(III), Ho(III), Er(III), Tm(III), Yb(III) or Lu(III).

14. **(new)** An optical recording medium according to claim 13, wherein M₁ is Co(III) or Cr(III).

15. **(new)** An optical recording medium according to claim 3, wherein R₃₁ is unsubstituted or substituted especially a metallocenyl radical.

16. **(new)** An optical recording medium according to claim 3, wherein in formula (I) M₁ is Co(III), Cr(III), Ru(III), Fe(III), Mn(III), V(III), Ti(III), Y(III), Mo(III), W(III), Nb(III), Rh(III), Ta(III), Ir(III), Au(III), Al(III), As(III), Sb(III), Bi(III), Sc(III), La(III), Ce(III), Pr(III), Nd(III), Pm(III), Sm(III), Eu(III), Gd(III), Tb(III), Dy(III), Ho(III), Er(III), Tm(III), Yb(III) or Lu(III).

17. **(new)** An optical recording medium according to claim 15, wherein M₁ is Co(III) or Cr(III).

18. **(new)** An optical recording medium according to claim 4, wherein in formula (I) M₁ is Co(III), Cr(III), Ru(III), Fe(III), Mn(III), V(III), Ti(III), Y(III), Mo(III), W(III), Nb(III), Rh(III), Ta(III), Ir(III), Au(III), Al(III), As(III), Sb(III), Bi(III), Sc(III), La(III), Ce(III), Pr(III), Nd(III), Pm(III), Sm(III), Eu(III), Gd(III), Tb(III), Dy(III), Ho(III), Er(III), Tm(III), Yb(III) or Lu(III).

19. **(new)** An optical recording medium according to claim 5, wherein in formula (I) M₁ is Co(III), Cr(III), Ru(III), Fe(III), Mn(III), V(III), Ti(III), Y(III), Mo(III), W(III), Nb(III), Rh(III), Ta(III), Ir(III), Au(III), Al(III), As(III), Sb(III), Bi(III), Sc(III), La(III), Ce(III), Pr(III), Nd(III), Pm(III), Sm(III), Eu(III), Gd(III), Tb(III), Dy(III), Ho(III), Er(III), Tm(III), Yb(III) or Lu(III).